NOAA Research in Louisiana

LA-2, 3, 6, and 7 (Based in Baton Rouge - serves entire Louisiana coast)

National Sea Grant College Program
Louisiana Sea Grant College Program

The Louisiana Sea Grant College Program, part of the National Sea Grant College Program, promotes the wise use of marine and coastal resources through research, education, advisory services, and technology transfer. Based at Louisiana State University (LSU), but statewide in scope, Louisiana Sea Grant was instrumental in the establishment and development of LSU's M.S. and Ph.D. programs in the marine sciences and also played a key role in the creation and nurturing of LSU research groups now designated the Coastal Ecology Institute, the Coastal Fisheries Institute, the Wetland Biogeochemistry Institute, and the National Ports and Waterways Institute at the University of New Orleans. In 1995, in partnership with Tidewater, Inc., and the Louisiana Board of Regents, Sea Grant established the John P. LaBorde Endowed Chair for Sea Grant Research and Technology Transfer at LSU. The endowment allows Louisiana Sea Grant to engage internationally recognized scientists or engineers for collaborative work with LSU faculty on marine and coastal issues identified as critical to Louisiana. Current research programs target aquaculture technology, oyster genetics, fish diseases, natural fisheries, sustainable community development, seafood harvesting and production, wetland restoration, and coastal water quality. Examples include oyster and fish diseases, waste treatment technology, coastal ecosystems management, coastal economic development, marine aquaculture systems development, and other topics relevant to the state of Louisiana and the nation. Louisiana Sea Grant provides information and outreach services to a variety of users, including coastal communities, seafood processors, aquaculturists, fishermen, educators, legislators and coastal policy makers, coastal tourism and recreation interests, and a wide cross-section of gulf-region citizens whose livelihoods depend on coastal and marine resources. The program's technology transfer activities bring the results of Sea Grant research to commercial application by the private sector. In FY 2001, Louisiana Sea Grant projects received funding of approximately $2 million from the National Sea Grant College Program. For more information please visit http://www.laseagrant.org

LA-2, 3, and 7 (Louisiana coast)

Atlantic Oceanographic and Meteorological Laboratory
Hurricane Research

The Atlantic Oceanographic and Meteorological Laboratory's Hurricane Research Division (HRD) conducts an annual field program during peak hurricane season, flying NOAA's two WP-3D Hurricane Hunter aircraft into all hurricanes threatening US coastlines. Dropsondes and onboard radar are used to profile hurricane winds and storm structure. HRD scientists then transmit real-time information to the National Hurricane Center (NHC) at the Tropical Prediction Center, one of NOAA's National Centers for Environmental Prediction (NCEP). An HRD workstation at NHC

processes the aircraft data to generate products for hurricane specialists. NOAA's G-IV jet is also used in the field program to profile wind currents surrounding and influencing the storm's track. HRD scientists incorporate these and other data to create wind analyses of hurricanes. These analyses are crucial in identifying regions of strong winds in the storm and are distributed to local emergency managers for hurricane warning and evacuation determinations. HRD scientists are also studying the characteristics of hurricane winds before and after landfall to help determine expected wind impacts as a hurricane moves over land. For more information please visit http://www.aoml.noaa.gov/hrd/index.html

LA-2, 3, and 7 (coastal waters)

National Undersea Research Program
National Undersea Research Center for the Southeastern U.S. and Gulf of Mexico

The National Undersea Research Center for the Southeastern U.S. and Gulf of Mexico is located at the University of North Carolina at Wilmington. It is one of six regional centers supported by the National Undersea Research Program (NURP). The center supports and conducts undersea research throughout the South Atlantic Bight (NC to FL), Florida Keys, and Gulf of Mexico. The Center provides research support for in situ oceanography conducted by divers, submersibles and remotely operated vehicles. Key research includes studies of the health of coastal reef systems in the Florida Keys, studies of marine fisheries population dynamics/habitat associations/recruitment processes, support of research on lithospheric resources and processes (including those related to offshore oil drilling, gas hydrates, climate change, sea level history, and sea floor evolution) and carbon cycling as it concerns the air-sea interaction in global warming. In FY 2001, the Center at Wilmington received funding of $2.64 million. For more information please visit http://www.uncwil.edu/nurc/

LA-2 and 5 (English Turn and Winnfield)

Forecast Systems Laboratory
GPS Meteorological Observing Systems

NOAA's Forecast Systems Laboratory (FSL) operates a rapidly expanding network of GPS Meteorological (GPS-Met) Observing Systems to monitor the total quantity of precipitable water vapor in the atmosphere. Currently, there are 93 systems over the contiguous 48 states and Alaska, and plans are being made to extend these observations to Hawaii, Puerto Rico, the Caribbean Islands, and Central America. Water vapor is an important but under-observed component of the atmosphere that plays a major role in severe weather events and the global climate system. GPS-Met systems provide accurate water vapor measurements under all weather conditions, including thick cloud cover and precipitation, and do so at very low cost. The network is being developed by FSL in cooperation with federal, state and local government agencies, universities, and the private sector. The GPS stations provide high-accuracy surveying and navigation services for National defense, automated agriculture, safe land and marine transportation, government infrastructure management, and 911 emergency response services. Fortuitously, these systems can also be used for meteorology with the addition of surface weather sensors. GPS-Met systems located in Louisiana include a site operated by NOAA near Winnfield and one operated by the U.S. Coast Guard at English Turn, near New Orleans. For more information please visit http://www.gpsmet.noaa.gov/jsp/index.jsp